

REMARKS/ARGUMENTS

Claims 14 to 19 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Claims 1 to 2, 7, 14 to 16, 20 to 21, 23 to 25 and 35 were rejected under 35 U.S.C. § 102(e) as being anticipated by Stretch (US 6,619,453). Claims 3 to 6, 8 to 13, 17 to 19, 22 and 26 to 28 were objected to, but were indicated as being allowable if rewritten in independent form. Claim 36 was allowed.

Claim 14 has been amended. Claim 37 has been added, support being found at [0032], [0033] and Fig.1 for example.

Reconsideration of the application is respectfully requested.

Claim Objections

Claims 3 to 6, 8 to 13, 17 to 19, 22 and 26 to 28 were objected to, but were indicated as being allowable if rewritten in independent form. Withdrawal of the objections to claims 3 to 6, 8 to 13, 17 to 19, 22 and 26 to 28 is respectfully requested in view of the below.

35 U.S.C. 112 Rejections

Claims 14 to 19 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite.

Claim 14 has been amended to provide proper antecedent basis for the jaws and withdrawal of the rejection is respectfully requested.

35 U.S.C. 102 Rejections

Claims 1 to 2, 7, 14 to 16, 20 to 21, 23 to 25 and 35 were rejected under 35 U.S.C. § 102(e) as being anticipated by Stretch (US 6,619,453).

Stretch shows an electromagnetic mechanical particle clutch. As described by Stretch at col. 1, lines 22 to 45, an electromagnetic friction clutch operates in an on-off manner in which a friction plate impacts against an output member due to magnetic field forces. "Unlike an electromagnetic friction clutch, a magnetic particle clutch" as in Stretch provides for a magnetically reactive medium 28 in an always present gap 26. See col 1, lines 38 to 43 and Figs. 2, 3 and 4.

The Stretch device incorporates the functions of an electromagnetic friction clutch as elements 70 in Fig. 4 and the functions of a magnetic particle clutch as elements 68 in Fig. 4. See col. 5, line 64 et seq.

Claim 1 recites “an electromagnetic friction clutch comprising:

a first clutch part and a second clutch part mounted so as to be rotatable relative to each other, the first clutch part having a soft magnetic material defining at least part of a magnetic circuit, the magnetic circuit having a magnetic force for pressing the first and second clutch parts together; and

at least one electromagnet being situated in the magnetic circuit to change the magnetic flux in the first and second clutch parts;

the magnetic circuit being guided in the first and second clutch parts in such a way that the magnetic flux changes at at least ten flux crossover points one after the other in a direction of flow of the magnetic circuit between the first and second clutch parts.”

The overall device of Stretch is clearly not an electromagnetic friction clutch as recited in claim 1 as Stretch itself states that magnetic particle clutches are “unlike” friction clutches and clearly describes the differences. Thus the overall Stretch device is a combination particle clutch and electromagnetic clutch (see lines 7 to 10) which is not an electromagnetic friction clutch as claimed. In addition, input member 18 is not part of any electromagnetic friction clutch as asserted.

To the extent Stretch does disclose an electromagnetic clutch with section 70 shown in Fig. 4, this section 70 does not disclose an electromagnetic friction clutch where the “magnetic circuit having a magnetic force for pressing the first and second clutch parts together” has “at least ten crossover points in a direction of flow of the magnetic circuit between the first and second clutch parts” as claimed.

Claim 35 recites an electromagnetic friction clutch comprising:

a first clutch part and a second clutch part mounted so as to be rotatable relative to each other, the first clutch part having a soft magnetic material defining at least part of a magnetic circuit, the magnetic circuit having a magnetic force for pressing the first and second clutch parts together;

at least one electromagnet being situated in the magnetic circuit to change the magnetic

flux in the first and second clutch parts;

the magnetic circuit being guided in the first and second clutch parts so that the magnetic flux changes at at least five flux crossover points one after the other in a direction of flow of the magnetic circuit between the first and second clutch parts, the soft magnetic material being at least partially configured as a laminated core having layers electrically insulated from each other at right angles to the direction of flow.”

Stretch also does not show such an electromagnetic friction clutch.

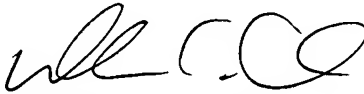
Withdrawal of the rejection to claims 1 to 2, 7, 14 to 16, 20 to 21, 23 to 25 and 35 is respectfully requested.

With further respect to amended claim 14, Stretch also does not show these limitations and withdrawal of the anticipation rejection to claims 14 to 16 is also respectfully requested.

CONCLUSION

The present application is respectfully submitted as being in condition for allowance and applicants respectfully request such action.

Respectfully submitted,
DAVIDSON, DAVIDSON & KAPPEL, LLC

By: 
William C. Gehris
Reg. No. 38,156

Davidson, Davidson & Kappel, LLC
485 Seventh Avenue
New York, New York 10018
(212) 736-1940